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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,090	02/27/2001	Steven A. McAlister	320038-401US	6212

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COOLEY, CHARLES E

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1723

DATE MAILED: 06/20/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/701,090</b>	Applicant(s) <b>McAlister</b>
	Examiner <b>Charles Cooley</b>	Art Unit <b>1723</b>
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --		
<b>Period for Reply</b> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
<b>Status</b> <p>1) <input type="checkbox"/> Responsive to communication(s) filed on _____</p> <p>2a) <input type="checkbox"/> This action is FINAL.      2b) <input checked="" type="checkbox"/> This action is non-final.</p> <p>3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11; 453 O.G. 213.</p>		
<b>Disposition of Claims</b> <p>4) <input checked="" type="checkbox"/> Claim(s) <u>1-13</u> is/are pending in the application.</p> <p>4a) Of the above, claim(s) _____ is/are withdrawn from consideration.</p> <p>5) <input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6) <input checked="" type="checkbox"/> Claim(s) <u>1-13</u> is/are rejected.</p> <p>7) <input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.</p>		
<b>Application Papers</b> <p>9) <input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10) <input checked="" type="checkbox"/> The drawing(s) filed on <u>27 Feb 2001</u> is/are a) <input type="checkbox"/> accepted or b) <input checked="" type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p>11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.</p> <p>12) <input checked="" type="checkbox"/> The oath or declaration is objected to by the Examiner.</p>		
<b>Priority under 35 U.S.C. §§ 119 and 120</b> <p>13) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of:</p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Certified copies of the priority documents have been received.</li> <li>2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</li> <li>3. <input checked="" type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> <p>*See the attached detailed Office action for a list of the certified copies not received.</p> <p>14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.</p> <p>15) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</p>		
<b>Attachment(s)</b> <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>6</u></p> <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p>		

Art Unit: 1723

## OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723

and the following will apply for this application:

a. Please direct all written correspondence with the correct application

serial number for this application to Art Unit 1723.

b. Telephone inquiries regarding this application should be directed to the Technology Center 1700 receptionist at (703) 308-0651 or to the Examiner at (703) 308-0112. Official facsimile correspondence filed before a final office action should be transmitted to (703) 872-9310. Official facsimile correspondence which responds to a final office action should be transmitted to (703) 872-9311.

c. Inquiries regarding application status, matching responses with applications, patent term questions, locating and retrieval of applications, incomplete office actions, requests for copies of office actions and/or references, requests to remail office actions, small/large entity status, or other administrative inquiries should be directed to the **Technology Center 1700 Customer Service Center** at (703) 306-5665.

### ***Priority***

2. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Art Unit: 1723

***Information Disclosure Statement***

3. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 8 MAY 2001.

***Oath/Declaration***

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 C.F.R. § 1.67(a) identifying this application by its Serial Number and filing date is required. See M.P.E.P. §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

***Drawings***

5. The drawings are objected to because of the following informalities:
  - a. the drawings contain improper sectional views. The plane upon which a sectional view is taken should be indicated on the view from which the section is cut by a broken line. The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view, and should have arrows to indicate the direction of sight (37 CFR 1.84(h)(3)). Correction is required.

Art Unit: 1723

For example, Figure 6 should be a sectional view taken along line 6-6 in Figure 5 (not sectional line A-B) and Figure 7 should be a sectional view taken along line 7-7 in Figure 5. All sectional views should be corrected in accordance with 37 CFR 1.84(h)(3).

Applicant should also ensure a proper one-to-one correspondence between the specification and drawings in accordance with MPEP 608.01(g) and 37 CFR 1.84(f). The brief description of the drawings and the descriptive portion of the specification require revision in accordance with the above drawing objections.

Correction is required.

6. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).

7. Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must include a print or pen-and-ink sketch showing changes in *red ink* in accordance with MPEP § 608.02(v).

IMPORTANT NOTE: The filing of new formal drawings to correct the noted defect may be deferred until the application is allowed by the examiner, but the print or

Art Unit: 1723

pen-and-ink sketch with proposed corrections shown in red ink is required in response to this Office Action, and *may not be deferred*.

***Specification***

8. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
9. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
10. The title is acceptable.

***Claim Rejections - 35 U.S.C. § 112, second paragraph***

11. Claims 9, 10, and 12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, line 3: "the compressed air supply" lacks antecedent basis.

Claim 10, line 3: "said valve sleeve" lacks antecedent basis; in line 4, "the valve body" lacks antecedent basis.

Art Unit: 1723

Claim 12, line 2 is worded in an awkward manner; in lines 2 and 3, "the valve body" lacks antecedent basis.

12. Each pending claim should be thoroughly reviewed such that these and any other informalities are corrected so the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.

***Claim Rejections - 35 U.S.C. § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-7, 9, and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by McAlister (USP 5,462,513).

The patent to McAlister (USP 5,462,513) discloses the recited centrifuge with variable opening flow control valves 37 with abrasion resistant bushing 108.

15. Claims 1-7 and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Knelson (USP 5,338,284).

Art Unit: 1723

The patent to Knelson (USP 5,338,284) discloses the recited centrifuge with variable opening flow control valves 50.

\* \* \*

With regard to the above rejections, the "adapted to" clauses in the claims are of no patentable consequence because it has been held that the recitation that an element is "adapted" to perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Furthermore, the operational and functional language of the claims (e.g., the language of claims 2-5) has been considered but fails to impart or invoke any further structure or means (per 35 USC 112, sixth paragraph and MPEP 2181) to the pending apparatus claims which defines over the applied prior art. Consequently, since all of the claimed structure is met by the applied prior art, the rejections under 35 USC 102 are deemed proper.

***Claim Rejections - 35 U.S.C. § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Art Unit: 1723

Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 1-9, and 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McAlister (USP 5,462,513) in view of Clarkson (USP 3,090,591).

Assuming, *arguendo*, that McAlister (USP 5,462,513) discloses the recited centrifuge substantially as claimed but does not disclose the claimed control valves, the patent to Clarkson (USP 3,090,591) discloses the recited muscle type control valve (Fig. 1) implemented for use in a environment where solids are suspended in a liquid (as in the centrifuging environment of McAlister). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the control valves in McAlister (USP 5,462,513) with the control valve as disclosed by Clarkson (USP 3,090,591) for the purposes of providing an unobstructed

Art Unit: 1723

circular inlet port the diameter of which may be selectively varied to control flow between full flow and shut off while maintaining the port circular over the major portion of the control range to prevent turbulence and head losses (Col. 1, lines 9-45 and col. 2, line 53 through col. 3, line 5).

19. Claims 1-9 and 12-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knelson (USP 5,338,284) in view of Clarkson (USP 3,090,591).

Assuming, *arguendo*, that Knelson (USP 5,338,284) discloses the recited centrifuge substantially as claimed but does not disclose the claimed control valves, the patent to Clarkson (USP 3,090,591) discloses the recited muscle type control valve (Fig. 1) implemented for use in a environment where solids are suspended in a liquid (as in the centrifuging environment of Knelson). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the control valves in Knelson (USP 5,338,284) with the control valve as disclosed by Clarkson (USP 3,090,591) for the purposes of providing an unobstructed circular inlet port the diameter of which may be selectively varied to control flow between full flow and shut off while maintaining the port circular over the major portion of the control range to prevent turbulence and head losses (Col. 1, lines 9-45 and col. 2, line 53 through col. 3, line 5).

Art Unit: 1723

20. While the examiner might speculate as to what is meant by the language of claim 10, the uncertainty provides the examiner with no proper basis for making the comparison between that which is claimed and the prior art (MPEP 2173.06). Rejections under 35 U.S.C. 103 should not be based upon "considerable speculation as to the meaning of terms employed and assumptions as to the scope of the claims." *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962). When no reasonably definite meaning can be ascribed to certain terms in a claim, the subject matter does not become obvious, but rather the claim becomes indefinite. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). As it has been held that it is improper to rely on what are at best speculative assumptions as to the meaning of a claim and then base a rejection under 35 U.S.C. 103 thereon, no such rejections have been made concerning claim 10. *Ex parte Brummer*, 12 USPQ2d 1654. However, the lack of such rejections should not be construed as meaning that the claims as presently drawn would be patentable if corrected. Any response should carefully consider the prior art of record in accordance with 37 CFR 1.111.

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 1723

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is (703) 308-0112.

23. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (703) 308-0651.



Dated: 14 June 2002

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**Charles Cooley  
Primary Examiner  
Art Unit 1723**